Safety data sheet

According to UK REACH (S.I. 2019/758)

EasySpray Foam 111

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier: EasySpray Foam 111

Other means of identification:

Not relevant

1.2 Relevant identified uses of the substance or mixture and uses advised against:

Relevant uses (Consumer use): Thermal insulation
Relevant uses (Professional users): Thermal insulation
Uses advised against: All uses not specified in this section or in section 7.3

1.3 Details of the supplier of the safety data sheet:

WOLF GROUP IBERICO S.A.U
AVDA. BERTRAN GÜELL, 78
08850 GAVÀ - BARCELONA - SPAIN
Phone: +34 936629911
QHSE.es@wolf-group.com
www.wolf-group.com

1.4 Emergency telephone number: 112

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

GB CLP Regulation (UK S.I. 2019/720 and UK S.I. 2020/1567):

Classification of this product has been carried out in accordance with GB CLP Regulation (UK S.I. 2019/720 and UK S.I. 2020/1567).
Aerosol 1: Flammable aerosols, Category 1, H222
Aerosol 1: Pressurised container: May burst if heated., H229
Aquatic Chronic 4: Hazardous to the aquatic environment, long-term hazard, Category 4, H413
Carc. 2: Carcinogenicity, Category 2, H351
Lact.: Reproductive toxicity, effects on or via lactation, H362

2.2 Label elements:

GB CLP Regulation (UK S.I. 2019/720 and UK S.I. 2020/1567):

Danger

Hazard statements:

H222 - Extremely flammable aerosol.
H229 - Pressurised container: May burst if heated.
H351 - Suspected of causing cancer.
H362 - May cause harm to breast-fed children.
H413 - May cause long lasting harmful effects to aquatic life.

Precautionary statements:

P101: If medical advice is needed, have product container or label at hand.
P102: Keep out of reach of children.
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211: Do not spray on an open flame or other ignition source.
P251: Do not pierce or burn, even after use.
P271: Use only outdoors or in a well-ventilated area.
P280: Wear protective gloves/protective clothing/respiratory protection/eye protection/protective footwear.
P410+P412: Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F.
P501: Dispose of the contents and/or its container using the separate collection system in your municipality.

Supplementary information:

EUH204: Contains isocyanates. May produce an allergic reaction.

Substances that contribute to the classification

Alkanes, C14-17, chloro; Reaction products of phosphoryl trichloride and 2-methyloxirane

2.3 Other hazards:

- CONTINUED ON NEXT PAGE -

SECTION 2: HAZARDS IDENTIFICATION (continued)

Product contains PBT/vPvB substances: Alkanes, C14-17, chloro

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance:

Not relevant

3.2 Mixture:

Chemical description: Mixture composed of organic substances

Components:

In accordance with Annex II of The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020, the product contains:

Identification	Chemical name/Classification	Concentration
CAS: 75-28-5 EC: 200-857-2 REACH: 01-2119485395-27-XXXX	**Isobutane** Flam. Gas 1A: H220; Press. Gas (Liq.): H280 - Danger	**10 - <20 %**
CAS: 115-10-6 EC: 204-065-8 REACH: 01-2119472128-37-XXXX	**Dimethyl ether** Flam. Gas 1A: H220; Press. Gas: H280 - Danger	**2,5 - <10 %**
CAS: 74-98-6 EC: 200-827-9 REACH: 01-2119486944-21-XXXX	**Propane** Flam. Gas 1A: H220; Press. Gas: H280 - Danger	**2,5 - <10 %**
CAS: 85535-85-9 EC: 287-477-0 REACH: 01-2119519269-33-XXXX	**Alkanes, C14-17, chloro** Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Lact.: H362; EUH066 - Warning	**2,5 - <5 %**
CAS: 1244733-77-4 EC: 807-935-0 REACH: 01-2119486772-26-XXXX	**Reaction products of phosphoryl trichloride and 2-methyloxirane** Acute Tox. 4: H302; Aquatic Chronic 3: H412; Carc. 2: H351 - Warning	**2,5 - <5 %**
CAS: 26471-62-5 EC: 247-722-4 REACH: 01-2119454791-34-XXXX	**Toluene Diisocyanate** Acute Tox. 2: H330; Aquatic Chronic 3: H412; Carc. 2: H351; Eye Irrit. 2: H319; Resp. Sens. 1: H334; Skin Irrit. 2: H315; Skin Sens. 1: H317; STOT SE 3: H335 - Danger	**0,01 - <0,1 %**
CAS: 556-67-2 EC: 209-136-7 REACH: 01-2119529238-36-XXXX	**Octamethylcyclotetrasiloxane** Aquatic Chronic 1: H410; Flam. Liq. 3: H226; Repr. 2: H361f - Warning	**0,01 - <0,1 %**

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

Other information:

Identification	M-factor	
Octamethylcyclotetrasiloxane CAS: 556-67-2	Acute	1
	Chronic	10

Identification	Specific concentration limit
Toluene Diisocyanate CAS: 26471-62-5	% (w/w) >=0,1: Resp. Sens. 1 - H334

Acute toxicity estimate for the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or as determined in accordance with Annex I to that Regulation:

Identification	Acute toxicity		Genus
Reaction products of phosphoryl trichloride and 2-methyloxirane CAS: 1244733-77-4 EC: 807-935-0	LD50 oral	632 mg/kg	Rat
	LD50 dermal	Not relevant	
	LC50 inhalation mist	Not relevant	

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

- CONTINUED ON NEXT PAGE -

SECTION 4: FIRST AID MEASURES (continued)

By inhalation:

This product is not classified as hazardous through inhalation. However, in case of intoxication symptoms it is recommended to remove the person affected from the area of exposure, provide clean air and keep at rest. Request medical attention if symptoms persist.

By skin contact:

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

By eye contact:

Rinse eyes thoroughly with water for at least 15 minutes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case removal could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS for the product.

By ingestion/aspiration:

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

4.2 Most important symptoms and effects, both acute and delayed:

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

4.3 Indication of any immediate medical attention and special treatment needed:

Not relevant

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

Suitable extinguishing media:

Foam extinguisher (AB), Dry Chemical Powder (ABC) Fire Extinguisher, Carbon dioxide extinguisher (BC)

Unsuitable extinguishing media:

Water jet

5.2 Special hazards arising from the substance or mixture:

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

5.3 Advice for firefighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and Self Contained Breathing Apparatus. Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...)

Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel:

Isolate leaks provided that there is no additional risk for the people performing this task. Evacuate the area and keep out those without protection. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inert medium. Remove any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.

For emergency responders:

Wear protective equipment. Keep unprotected persons away. See section 8.

6.2 Environmental precautions:

- CONTINUED ON NEXT PAGE -

SECTION 6: ACCIDENTAL RELEASE MEASURES (continued)

Avoid at all cost any type of spillage into an aqueous medium. Contain the product absorbed appropriately in hermetically sealed containers. Notify the relevant authority in case of exposure to the general public or the environment.

6.3 Methods and material for containment and cleaning up:

It is recommended:

Prevent the entrance of product in drains, sewers or watercourses. Absorb the spill using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. Collect the product in appropriate containers and manage it according to current legislation.
Spillages in water or sea:
Small spillages:
Contain spillage using barriers or similar equipment. Use suitable absorbents for collection and treat the waste in accordance with current regulations.
Large spillages:
If possible, contain spillage in open water using barriers or similar equipment. If this is not possible, try to control its spread and collect the product with suitable mechanical means. Always consult experts before using dispersants and make sure you have the necessary approvals if they are to be used. Treat the waste according to current regulations.

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

A.- General precautions for safe use

Comply with the current legislation concerning the prevention of industrial risks with regards manually handling weights. Maintain order, cleanliness and dispose of using safe methods (section 6).

B.- Technical recommendations for the prevention of fires and explosions

Avoid the evaporation of the product as it contains flammable substances, which could form flammable vapour/air mixtures in the presence of sources of ignition. Control sources of ignition (mobile phones, sparks,...) and transfer at slow speeds to avoid the creation of electrostatic charges. Consult section 10 for conditions and materials that should be avoided.

C.- Technical recommendations on general occupational hygiene

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

Due to the danger of this product for the environment it is recommended to use it within an area containing contamination control barriers in case of spillage, as well as having absorbent material in close proximity.

7.2 Conditions for safe storage, including any incompatibilities:

A.- Specific storage requirements

Maximum Temp.: 30 ºC

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be assessed in the workplace:

EH40/2005 Workplace exposure limits, fourth edition, published 2020:

Identification	Occupational exposure limits		
Dimethyl ether	WEL (8h)	400 ppm	766 mg/m³
CAS: 115-10-6	WEL (15 min)	500 ppm	958 mg/m³

DNEL (Workers):

- CONTINUED ON NEXT PAGE -

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Dimethyl ether	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 115-10-6	Dermal	Not relevant	Not relevant	Not relevant	Not relevant
EC: 204-065-8	Inhalation	Not relevant	Not relevant	1894 mg/m³	Not relevant
Alkanes, C14-17, chloro	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 85535-85-9	Dermal	Not relevant	Not relevant	47.9 mg/kg	Not relevant
EC: 287-477-0	Inhalation	Not relevant	Not relevant	6.7 mg/m³	Not relevant
Reaction products of phosphoryl trichloride and 2-methyloxirane	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 1244733-77-4	Dermal	Not relevant	Not relevant	2.91 mg/kg	Not relevant
EC: 807-935-0	Inhalation	Not relevant	Not relevant	8.2 mg/m³	Not relevant
Toluene Diisocyanate	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 26471-62-5	Dermal	Not relevant	Not relevant	0.14 mg/kg	Not relevant
EC: 247-722-4	Inhalation	Not relevant	0.035 mg/m³	0.035 mg/m³	0.14 mg/m³
Octamethylcyclotetrasiloxane	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 556-67-2	Dermal	Not relevant	Not relevant	Not relevant	Not relevant
EC: 209-136-7	Inhalation	Not relevant	Not relevant	73 mg/m³	73 mg/m³

DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Dimethyl ether	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 115-10-6	Dermal	Not relevant	Not relevant	Not relevant	Not relevant
EC: 204-065-8	Inhalation	Not relevant	Not relevant	471 mg/m³	Not relevant
Alkanes, C14-17, chloro	Oral	Not relevant	Not relevant	0.58 mg/kg	Not relevant
CAS: 85535-85-9	Dermal	Not relevant	Not relevant	28.75 mg/kg	Not relevant
EC: 287-477-0	Inhalation	Not relevant	Not relevant	2 mg/m³	Not relevant
Reaction products of phosphoryl trichloride and 2-methyloxirane	Oral	2 mg/kg	Not relevant	0.52 mg/kg	Not relevant
CAS: 1244733-77-4	Dermal	Not relevant	Not relevant	1.04 mg/kg	Not relevant
EC: 807-935-0	Inhalation	Not relevant	Not relevant	1.45 mg/m³	Not relevant
Octamethylcyclotetrasiloxane	Oral	Not relevant	Not relevant	3.7 mg/kg	Not relevant
CAS: 556-67-2	Dermal	Not relevant	Not relevant	Not relevant	Not relevant
EC: 209-136-7	Inhalation	Not relevant	Not relevant	13 mg/m³	13 mg/m³

PNEC:

Identification				
Dimethyl ether	STP	160 mg/L	Fresh water	0.155 mg/L
CAS: 115-10-6	Soil	0.045 mg/kg	Marine water	0.016 mg/L
EC: 204-065-8	Intermittent	1.549 mg/L	Sediment (Fresh water)	0.681 mg/kg
	Oral	Not relevant	Sediment (Marine water)	0.069 mg/kg
Alkanes, C14-17, chloro	STP	80 mg/L	Fresh water	0.001 mg/L
CAS: 85535-85-9	Soil	11.9 mg/kg	Marine water	0.0002 mg/L
EC: 287-477-0	Intermittent	Not relevant	Sediment (Fresh water)	13 mg/kg
	Oral	0.01 g/kg	Sediment (Marine water)	2.6 mg/kg
Reaction products of phosphoryl trichloride and 2-methyloxirane	STP	19.1 mg/L	Fresh water	0.32 mg/L
CAS: 1244733-77-4	Soil	0.34 mg/kg	Marine water	0.032 mg/L
EC: 807-935-0	Intermittent	0.51 mg/L	Sediment (Fresh water)	11.5 mg/kg
	Oral	0.0116 g/kg	Sediment (Marine water)	1.15 mg/kg
Toluene Diisocyanate	STP	1 mg/L	Fresh water	0.013 mg/L
CAS: 26471-62-5	Soil	1 mg/kg	Marine water	0.001 mg/L
EC: 247-722-4	Intermittent	0.125 mg/L	Sediment (Fresh water)	Not relevant
	Oral	Not relevant	Sediment (Marine water)	Not relevant

- CONTINUED ON NEXT PAGE -

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification				
Octamethylcyclotetrasiloxane	STP	10 mg/L	Fresh water	0.0015 mg/L
CAS: 556-67-2	Soil	0.54 mg/kg	Marine water	0.00015 mg/L
EC: 209-136-7	Intermittent	Not relevant	Sediment (Fresh water)	3 mg/kg
	Oral	0.041 g/kg	Sediment (Marine water)	0.3 mg/kg

8.2 Exposure controls:

A.- Individual protection measures, such as personal protective equipment

As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<UKCA marking>> or <<CE marking>>. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,…) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1. All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection

Pictogram	PPE	Remarks
 Mandatory respiratory tract protection	Filter mask for gases, vapours and particles	Replace when an increase in resistence to breathing is observed and/or a smell or taste of the contaminant is detected.

C.- Specific protection for the hands

Pictogram	PPE	Remarks
 Mandatory hand protection	Chemical protective gloves (Material: Nitrile, Breakthrough time: > 480 min, Thickness: 0.35 mm, Conditions of use: Normal)	Replace the gloves at any sign of deterioration.

As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application.

D.- Eye and face protection

Pictogram	PPE	Remarks
 Mandatory face protection	Panoramic glasses against splash/projections.	Clean daily and disinfect periodically according to the manufacturer´s instructions. Use if there is a risk of splashing.

E.- Body protection

Pictogram	PPE	Remarks
	Work clothing	Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 6529:2013, EN ISO 6530:2005, EN ISO 13688:2013, EN 464:1994.
 Mandatory foot protection	Safety footwear for protection against chemical risk	Replace boots at any sign of deterioration.

F.- Additional emergency measures

It is advised to implement additional emergency equipments in workplaces that are particularly exposed to the product or in situations where risk assessments highlight the necessity of such equipments.

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011	 Eyewash stations	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011

- CONTINUED ON NEXT PAGE -

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Environmental exposure controls:

To comply with environmental protection regulations, it is recommended to prevent any spillage of the product and its container. For more detailed information, please refer to subsection 7.1.D.

The Volatile Organic Compounds in Paints, Varnishes and Vehicle Refinishing Products Regulations 2012:

V.O.C. (Supply):	31.18 % weight
V.O.C. density at 20 ºC:	270.31 kg/m³ (270.31 g/L)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

Appearance:	
Physical state at 20 ºC:	Aerosol
Appearance:	Not relevant *
Colour:	Light yellow
Odour:	Not relevant *
Odour threshold:	Not relevant *
Volatility:	
Boiling point at atmospheric pressure:	-42 ºC (Propellant)
Vapour pressure at 20 ºC:	Not relevant *
Vapour pressure at 50 ºC:	<300000 Pa (300 kPa)
Evaporation rate at 20 ºC:	Not relevant *
Product description:	
Density at 20 ºC:	867 kg/m³
Relative density at 20 ºC:	Not relevant *
Dynamic viscosity at 20 ºC:	Not relevant *
Kinematic viscosity at 20 ºC:	Not relevant *
Kinematic viscosity at 40 ºC:	Not relevant *
Concentration:	Not relevant *
pH:	Not relevant *
Vapour density at 20 ºC:	Not relevant *
Partition coefficient n-octanol/water 20 ºC:	Not relevant *
Solubility in water at 20 ºC:	Not relevant *
Solubility properties:	Not relevant *
Decomposition temperature:	Not relevant *
Melting point/freezing point:	Not relevant *
Recipient pressure:	Not relevant *
Flammability:	
Flash Point:	Not relevant *
Flammability (solid, gas):	Not relevant *
Autoignition temperature:	410 ºC (Propellant)
Lower flammability limit:	Not relevant *
Upper flammability limit:	Not relevant *
Particle characteristics:	
Median equivalent diameter:	Not relevant *

*Not relevant due to the nature of the product, not providing information property of its hazards.

- CONTINUED ON NEXT PAGE -

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

9.2 Other information:

Information with regard to physical hazard classes:

Explosive properties:	Not relevant *
Oxidising properties:	Not relevant *
Corrosive to metals:	Not relevant *
Heat of combustion:	Not relevant *
Aerosols-total percentage (by mass) of flammable components:	Not relevant *

Other safety characteristics:

Surface tension at 20 ºC:	Not relevant *
Refraction index:	Not relevant *

*Not relevant due to the nature of the product, not providing information property of its hazards.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7 from Safety Data Sheet.

10.2 Chemical stability:

Chemically stable under the indicated conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Precaution	Precaution	Risk of combustion	Avoid direct impact	Not applicable

10.5 Incompatible materials:

Acids	Water	Oxidising materials	Combustible materials	Others
Avoid strong acids	Not applicable	Avoid direct impact	Not applicable	Avoid alkalis or strong bases

10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO_2), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

The experimental information related to the toxicological properties of the product itself is not available

Contains glycols. It is recommended not to breathe the vapours for prolonged periods of time due to the possibility of effects that are hazardous to the health .

Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

A- Ingestion (acute effect):

- Acute toxicity: Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for consumption. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met. However, it does contain substances classified as hazardous for this effect. For more information see section 3.

B- Inhalation (acute effect):

- CONTINUED ON NEXT PAGE -

SECTION 11: TOXICOLOGICAL INFORMATION (continued)

- Acute toxicity : Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for inhalation. For more information see section 3.

C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for skin contact. For more information see section 3.
- Contact with the eyes: Based on available data, the classification criteria are not met. However, it does contain substances classified as hazardous for this effect. For more information see section 3.

D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

- Carcinogenicity: Exposure to this product can cause cancer. For more specific information on the possible health effects see section 2.
  IARC: Toluene Diisocyanate (2B); Alkanes, C14-17, chloro (2B)
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- Reproductive toxicity: May cause harm to breast-fed children

E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous with sensitising effects. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous with sensitising effects. For more information see section 3.

F- Specific target organ toxicity (STOT) - single exposure:

Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for inhalation. For more information see section 3.

G- Specific target organ toxicity (STOT)-repeated exposure:

- Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met. However, it does contain substances which are classified as dangerous due to repetitive exposure. For more information see section 3.

H- Aspiration hazard:

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

Other information:

Not relevant

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
Alkanes, C14-17, chloro CAS: 85535-85-9 EC: 287-477-0	LD50 oral	>2000 mg/kg	
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation vapour	>20 mg/L	
Reaction products of phosphoryl trichloride and 2-methyloxirane CAS: 1244733-77-4 EC: 807-935-0	LD50 oral	632 mg/kg	Rat
	LD50 dermal	>2000 mg/kg	Rat
	LC50 inhalation vapour	>20 mg/L	
Isobutane CAS: 75-28-5 EC: 200-857-2	LD50 oral	>2000 mg/kg	
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation gases	>20000 mg/L	
Propane CAS: 74-98-6 EC: 200-827-9	LD50 oral	>2000 mg/kg	
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation gases	>20000 mg/L	
Dimethyl ether CAS: 115-10-6 EC: 204-065-8	LD50 oral	>2000 mg/kg	
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation gases	164000 ppm (4 h)	Rat
	LC50 inhalation mist	164000 ppm (4 h)	

- CONTINUED ON NEXT PAGE -

SECTION 11: TOXICOLOGICAL INFORMATION (continued)

Identification	Acute toxicity		Genus
Toluene Diisocyanate CAS: 26471-62-5 EC: 247-722-4	LD50 oral	3360 mg/kg	Rat
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation vapour	0.5 mg/L	
Octamethylcyclotetrasiloxane CAS: 556-67-2 EC: 209-136-7	LD50 oral	61440 mg/kg	Rat
	LD50 dermal	10000 mg/kg	Rabbit
	LC50 inhalation vapour	>20 mg/L	

Only the physical form mist can occur during any reasonably expected use of the product, including when the product is used to produce a new product.

SECTION 12: ECOLOGICAL INFORMATION

May cause long lasting harmful effects to aquatic life.

12.1 Toxicity:

Product-specific aquatic toxicity:

Acute toxicity		Species	Genus
EC50	1000 mg/L (48 h)	Daphnia magna	Crustacean
EC50	1000 mg/L (72 h)	Desmodesmus subspicatus	Algae

Substance-specific aquatic toxicity:

Acute toxicity:

Identification	Concentration		Species	Genus
Alkanes, C14-17, chloro CAS: 85535-85-9	LC50	>0.1 - 1 mg/L (96 h)		Fish
	EC50	>0.1 - 1 mg/L (48 h)		Crustacean
	EC50	>0.1 - 1 mg/L (72 h)		Algae
Reaction products of phosphoryl trichloride and 2-methyloxirane CAS: 1244733-77-4	LC50	100 mg/L (96 h)	Danio rerio	Fish
	EC50	131 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	82 mg/L (72 h)	Pseudokirchneriella subcapitata	Algae
Toluene Diisocyanate CAS: 26471-62-5	LC50	133 mg/L (96 h)	Oncorhynchus mykiss	Fish
	EC50	12.5 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	4300 mg/L (96 h)	Chlorella vulgaris	Algae
Octamethylcyclotetrasiloxane CAS: 556-67-2	LC50	500 mg/L (96 h)	Brachydanio rerio	Fish
	EC50	Not relevant	Daphnia magna	Crustacean
	EC50	Not relevant	Pseudokirchneriella subcapitata	Algae

Chronic toxicity:

Identification	Concentration		Species	Genus
Reaction products of phosphoryl trichloride and 2-methyloxirane	NOEC	Not relevant		
CAS: 1244733-77-4	NOEC	32 mg/L	Daphnia magna	Crustacean
Toluene Diisocyanate	NOEC	Not relevant		
CAS: 26471-62-5	NOEC	1.1 mg/L	Daphnia magna	Crustacean
Octamethylcyclotetrasiloxane	NOEC	>0.01 - 0.1 mg/L		Fish
CAS: 556-67-2	NOEC	>0.01 - 0.1 mg/L		Crustacean

12.2 Persistence and degradability:

Substance-specific information:

Identification	Degradability		Biodegradability	
Reaction products of phosphoryl trichloride and 2-methyloxirane	BOD5	Not relevant	Concentration	20 mg/L
CAS: 1244733-77-4	COD	Not relevant	Period	28 days
EC: 807-935-0	BOD5/COD	Not relevant	% Biodegradable	14 %
Octamethylcyclotetrasiloxane	BOD5	Not relevant	Concentration	10 mg/L
CAS: 556-67-2	COD	Not relevant	Period	29 days
EC: 209-136-7	BOD5/COD	Not relevant	% Biodegradable	4 %

- CONTINUED ON NEXT PAGE -

SECTION 12: ECOLOGICAL INFORMATION (continued)

12.3 Bioaccumulative potential:

Substance-specific information:

Identification	Bioaccumulation potential	
Isobutane	BCF	27
CAS: 75-28-5	Pow Log	2.76
EC: 200-857-2	Potential	Low
Propane	BCF	13
CAS: 74-98-6	Pow Log	2.86
EC: 200-827-9	Potential	Low
Reaction products of phosphoryl trichloride and 2-methyloxirane	BCF	8
CAS: 1244733-77-4	Pow Log	3.17
EC: 807-935-0	Potential	Low
Octamethylcyclotetrasiloxane	BCF	12400
CAS: 556-67-2	Pow Log	6.5
EC: 209-136-7	Potential	Very High

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
Isobutane	Koc	35	Henry	120576.75 Pa·m³/mol
CAS: 75-28-5	Conclusion	Very High	Dry soil	Yes
	Surface tension	9.84E-3 N/m (25 °C)	Moist soil	Yes
Dimethyl ether	Koc	Not relevant	Henry	Not relevant
CAS: 115-10-6	Conclusion	Not relevant	Dry soil	Not relevant
	Surface tension	1.136E-2 N/m (25 °C)	Moist soil	Not relevant
Propane	Koc	460	Henry	71636.78 Pa·m³/mol
CAS: 74-98-6	Conclusion	Moderate	Dry soil	Yes
	Surface tension	7.02E-3 N/m (25 °C)	Moist soil	Yes
Reaction products of phosphoryl trichloride and 2-methyloxirane	Koc	324.2	Henry	6E-3 Pa·m³/mol
CAS: 1244733-77-4	Conclusion	Moderate	Dry soil	Not relevant
	Surface tension	Not relevant	Moist soil	Not relevant
Octamethylcyclotetrasiloxane	Koc	16600	Henry	1200000 Pa·m³/mol
CAS: 556-67-2	Conclusion	Immobile	Dry soil	Yes
	Surface tension	1.819E-2 N/m (25 °C)	Moist soil	Yes

12.5 Results of PBT and vPvB assessment:

Product contains PBT/vPvB substances: Alkanes, C14-17, chloro

12.6 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Code	Description	Waste class
16 05 04*	gases in pressure containers (including halons) containing hazardous substances	Hazardous

Type of waste:

HP3 Flammable, HP14 Ecotoxic, HP7 Carcinogenic

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance The Waste (England & Wales) Regulations 2011, 2011 No. 988. As under 15 01 of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-hazardous residue. Waste should not be disposed of to drains. See paragraph 6.2.

Regulations related to waste management:

- CONTINUED ON NEXT PAGE -

SECTION 13: DISPOSAL CONSIDERATIONS (continued)

In accordance with Annex II of UK REACH the provisions related to waste management are stated:

UK legislation: The Waste (England & Wales) Regulations 2011.

SECTION 14: TRANSPORT INFORMATION

Transport of dangerous goods by land:

With regard to ADR 2023 and RID 2023:

14.1	**UN number:**	UN1950
14.2	**UN proper shipping name:**	AEROSOLS
14.3	**Transport hazard class(es):**	2
	Labels:	2.1
14.4	**Packing group:**	N/A
14.5	**Environmental hazards:**	No
14.6	**Special precautions for user**	
	Tunnel restriction code:	D
	Physico-Chemical properties:	see section 9
	Limited quantities:	1 L
14.7	**Transport in bulk according to Annex II of Marpol and the IBC Code:**	Not relevant

Transport of dangerous goods by sea:

With regard to IMDG 41-22:

14.1	**UN number:**	UN1950
14.2	**UN proper shipping name:**	AEROSOLS
14.3	**Transport hazard class(es):**	2
	Labels:	2.1
14.4	**Packing group:**	N/A
14.5	**Marine pollutant:**	No
14.6	**Special precautions for user**	
	Special regulations:	63, 959, 190, 277, 327, 344
	EmS Codes:	F-D, S-U
	Physico-Chemical properties:	see section 9
	Limited quantities:	1 L
	Segregation group:	Not relevant
14.7	**Transport in bulk according to Annex II of Marpol and the IBC Code:**	Not relevant

Transport of dangerous goods by air:

With regard to IATA/ICAO 2024:

14.1	**UN number:**	UN1950
14.2	**UN proper shipping name:**	AEROSOLS
14.3	**Transport hazard class(es):**	2
	Labels:	2.1
14.4	**Packing group:**	N/A
14.5	**Environmental hazards:**	No
14.6	**Special precautions for user**	
	Physico-Chemical properties:	see section 9
14.7	**Transport in bulk according to Annex II of Marpol and the IBC Code:**	Not relevant

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

- CONTINUED ON NEXT PAGE -

SECTION 15: REGULATORY INFORMATION (continued)

- Substances listed in UK candidate list of substances of very high concern (SVHCs): *Alkanes, C14-17, chloro (85535-85-9)* ; *Octamethylcyclotetrasiloxane (556-67-2)* ; *Decamethylcyclopentasiloxane (541-02-6)* ; *Dodecamethylcyclohexasiloxane (540-97-6)* ; *Octamethylcyclotetrasiloxane (556-67-2)*
- Substances listed in UK REACH Authorisation List (Annex 14): Not relevant

The Control of Major Accident Hazards Regulations 2015:

Section	Description	Lower-tier requirements	Upper-tier requirements
P3a	FLAMMABLE AEROSOLS	150	500

Restrictions to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII UK REACH, etc ….):

Shall not be used in:
—ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
—tricks and jokes,
—games for one or more participants, or any article intended to be used as such, even with ornamental aspects.

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

Other legislation:

The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020.
The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2020.
Control of Substances Hazardous to Health Regulations 2002 (as amended)
EH40/2005 Workplace exposure limits.
The Aerosol Dispensers Regulations 2009
The Product Safety and Metrology etc. (Amendment etc.) (EU Exit) Regulations 2019: SCHEDULE 13 -Amendment of the Aerosol Dispensers Regulations 2009
The Product Safety and Metrology etc. (Amendment etc.) (UK(NI) Indication) (EU Exit) Regulations 2020

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

This safety data sheet has been designed in accordance with ANNEX II-The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020.

Texts of the legislative phrases mentioned in section 2:

H222: Extremely flammable aerosol.
H351: Suspected of causing cancer.
H362: May cause harm to breast-fed children.
H413: May cause long lasting harmful effects to aquatic life.
H229: Pressurised container: May burst if heated.

Texts of the legislative phrases mentioned in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

GB CLP Regulation (UK S.I. 2019/720 and UK S.I. 2020/1567):

Acute Tox. 2: H330 - Fatal if inhaled.
Acute Tox. 4: H302 - Harmful if swallowed.
Aquatic Acute 1: H400 - Very toxic to aquatic life.
Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects.
Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects.
Carc. 2: H351 - Suspected of causing cancer.
Eye Irrit. 2: H319 - Causes serious eye irritation.
Flam. Gas 1A: H220 - Extremely flammable gas.
Flam. Liq. 3: H226 - Flammable liquid and vapour.
Lact.: H362 - May cause harm to breast-fed children.
Press. Gas (Liq.): H280 - Contains gas under pressure, may explode if heated.
Press. Gas: H280 - Contains gas under pressure, may explode if heated.
Repr. 2: H361f - Suspected of damaging fertility.
Resp. Sens. 1: H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin Irrit. 2: H315 - Causes skin irritation.
Skin Sens. 1: H317 - May cause an allergic skin reaction.
STOT SE 3: H335 - May cause respiratory irritation.

- CONTINUED ON NEXT PAGE -

SECTION 16: OTHER INFORMATION (continued)

Advice related to training:

Training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources:

http://echa.europa.eu
http://eur-lex.europa.eu

Abbreviations and acronyms:

ADR: European agreement concerning the international carriage of dangerous goods by road
IMDG: International maritime dangerous goods code
IATA: International Air Transport Association
ICAO: International Civil Aviation Organisation
COD: Chemical Oxygen Demand
BOD5: 5day biochemical oxygen demand
BCF: Bioconcentration factor
LD50: Lethal Dose 50
LC50: Lethal Concentration 50
EC50: Effective concentration 50
LogPOW: Octanolwater partition coefficient
Koc: Partition coefficient of organic carbon
UFI: unique formula identifier
IARC: International Agency for Research on Cancer

Other information:

Classification procedure:
Aerosol 1: Calculation method
Aerosol 1: Calculation method
Lact.: Calculation method
Aquatic Chronic 4: Test data

- END OF SAFETY DATA SHEET -